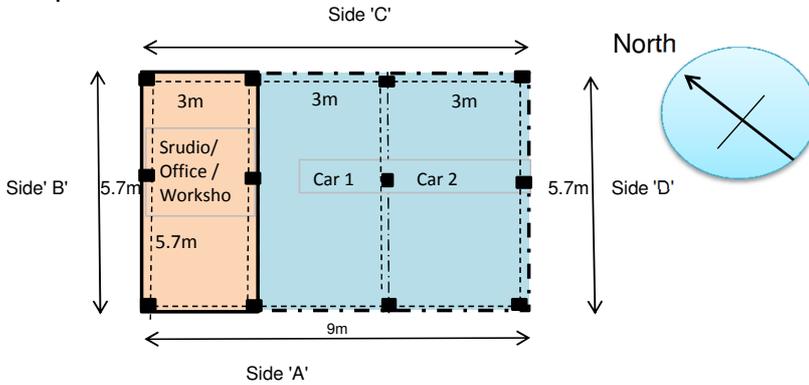


Instructions

1. look at the car port examples on this web site
2. sketch down on paper the plan you want to have
3. divide the plan up into the different use areas you want
4. mark on the measurements that you want each area to have
5. add up the total lengths and widths and mark these on the outside walls
6. mark on where you want to have the 150x150 square posts
(Note: Posts can be spaced at maximum centres of 3m without walls between, and 6m with walls between)
7. mark on the walls that you wish to be infilled (solid) and divisions to be open (dotted)
8. Give each side a letter and mark on the approximate North point so that you can refer to these easily

Example 1



9. also mark on where the beams will go.
You will need these on all outside walls and between outside posts, as dotted lines show

10. Floor Area - TIP: to automatically convert measurements, enter "feet to metres" in Google Search

Multiply the outside length of side "A" by the outside length of side "B"
 $9m \times 5.7m = 51.3 \text{ square metres}$

In this example there are:-

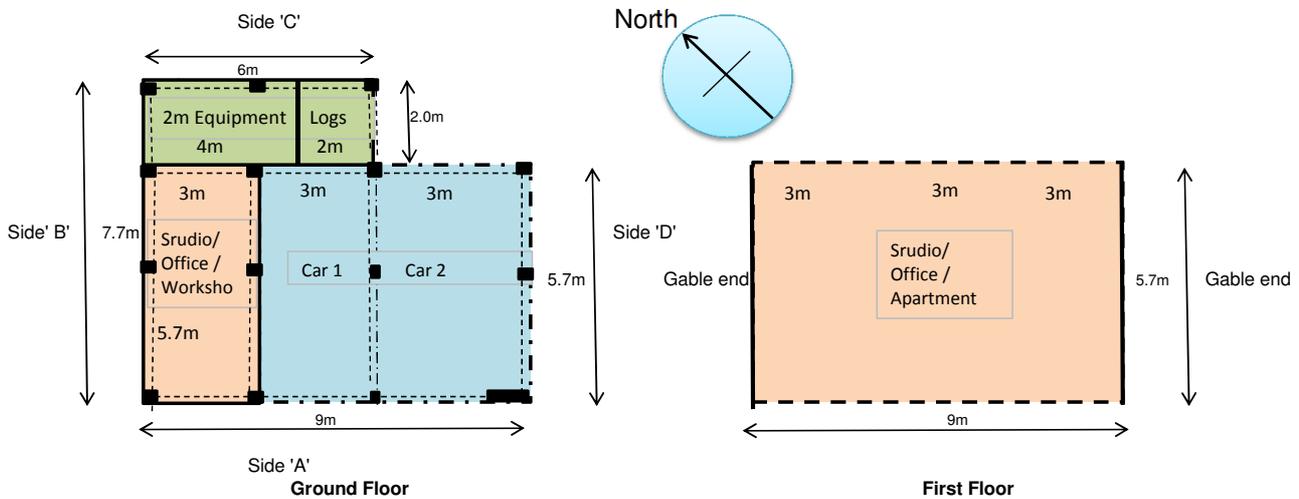
- 12 posts
- 6 beams
- 17.4 meters of infilled walls
- 17.7 metres of open sides
- 51.3 sq m of ground floor area

Example Plan 2

For something a bit more complicated we'll add lean-to stores for garden equipment and logs onto side "c"

11. Repeat the process 1 to 9 above ADDING a "Room in the Roof" over the main ground floor area
 Note that the floor sits on joists connected to the ground floor beams, and there are no posts or beams in this area.
 Also note that there are no walls to sides "A" & "C" since these are the slopes of the roof. Only the Gable End walls "B" & "D" have walls

You might now have something like the drawing below



11. Floor Area - TIP: to automatically convert measurements, enter "feet to metres" in Google Search

Multiply the length of each rectangle by its width, e.g. in the example above this will be:-

Ground Floor

Equipment and log store $2\text{m} \times 6\text{m} = 12.0$ square metres (12m²)
Studio/office/workshop $3\text{m} \times 5.7\text{m} = 17.1$ square meters (17.1m²)
Car 1 & Car 2 - $5.7\text{m} \times 6\text{m} = 34.2$ square metres (34.2m²)

A ground floor area total of **63.3** square metres (63.3m²)

First Floor (room in roof)

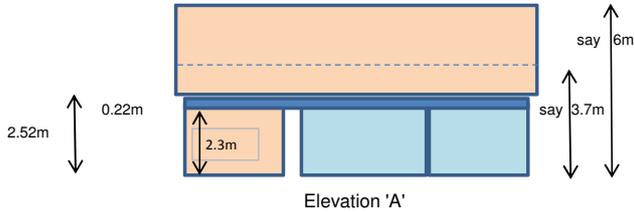
Over the Office & Garage only, $9\text{m} \times 5.7\text{m} = 51.3$ square metres (51.3m²)
(The floor joists and floor deck will cover the whole area)

In this example there are:-

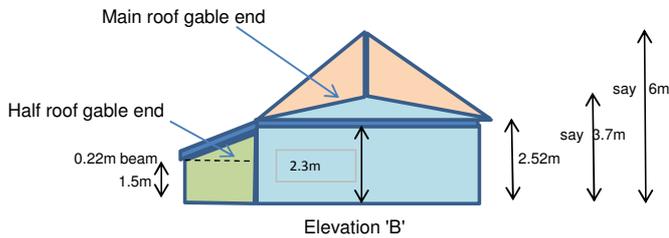
- 15 posts
- 8 beams
- 28.4 meters of infilled walls
- 16.7 metres of open sides
- 11.4 metres of gable ends
- 63.3 sq metres of ground floor area
- 51.3 sq metres of first floor " Room in the Roof " area

Now for the Elevations

12. first draw what you want your building to look like from the front
13. you already know the spacing of the 150x150 posts from your plan
14. decide how high you want it to be to the underneath side of the beams (e.g. for vehicle access)
15. since the beams are 220mm deep, you can now specify the post height
16. mark on the height from floor of building to top of beam (this will be the same level as the top of any joists)
17. decide what type of roof your want - low, to stay under any 4m planning requirement, or high for room in roof
18. also decide if you want the roof to overhang the walls, or be flush (usually 150mm overhang)



19. if you have different height requirements, say for equipment and log stores, show these on the side elevation
20. mark the height you want at the bottom of the 220mm beam along the lowest side.
21. this will give you the lowest post height required on this side



22. this shows that
 - a. there is no beam between the low 'lean-to' on elevation 'C' and the main post and beam
 - b. The posts along elevation 'C' will be only 1.5m high underneath the 220mm deep beam

We can now see that there will be:-

- 3 posts 1.5m high along elevation 'C'
 - 12 posts 2.52m high

 - 1 beam 6m long
 - 2 beams 9 m long
 - 1 beam 7.7m long
 - 3 beam 5.7m long
 - 1 beam 2m long
- To make date entry simple, add all these up to make 1 long beam of 50.8m
- 28.4 meters of infilled walls
 - 16.7 metres of open sides

 - 2 main gable ends 5.7m wide = total width 11.4m
 - 2 half gable ends to lean-to section each 2m wide = total width 4m

 - 63.3 square metres ground floor area
 - 51.3 square meters first floor room in roof area (if required)

Write all of this down ready for date entry on the next page